

Application No. 09/459,138

REMARKS

Applicants' agent wishes to thank the Examiner for the consideration of the response to the first Office Action and for reviewing the current rejections in telephone conversations on 24 October 2001.

This response fully addresses the issues raised in the aforementioned Office Action. A detailed discussion of each issue is provided in the sections that follow.

Briefly, this response includes the following items:

1. The paragraph beginning on page 13 at line 8 of the specification has been amended to correct a typographical error by reciting "electromagnetic field responsive member" instead of "barrier member". The incorrect wording was inadvertently retained from a previous version of the specification that was used in a parent application.
2. Independent Claims 1, 4, and 12 have been amended to recite in their preambles that the claimed methods are for making flangeless seams without a barrier member, in order to distinguish the subject matter sought to be patented from that cited in the rejection of claims under 35 U.S.C. § 103.
3. The rejection of claims under 35 U.S.C. § 103 has been traversed and argued, in light of the aforementioned amendments to the independent claims.
4. Claim 13 has been amended to delete the step of removing the electromagnetic field responsive member, since this step is not necessary for the allowance of this claim.

No new matter has been added by the aforementioned amendments or arguments.

Examiner's Response to Applicants' Arguments

Applicants' agent wishes to thank the Examiner for the explanatory response to the applicants' arguments that were presented in the response to the first Office Action. This written explanation, as well as the clarification provided by the Examiner in the telephone conversations on 24 October 2001, were helpful in understanding the Examiner's view of the relationship of the subject application to the cited U.S. Patent 5,662,638, which was granted in the great-grandparent application and which is now cited by the Examiner as prior art.

Allowable Subject Matter

Applicants' agent wishes to thank the Examiner for the allowance of Claim 6 and Claims 13 through 16 and for the statements regarding the reasons for their allowance.

Amendment of Independent Claims to Exclude Barric Member

As noted above, independent Claims 1, 4, and 12 have been amended to recite in their preambles that the claimed methods are for making flangeless seams without a barrier member. Support for this negative limitation, or exclusionary proviso, is found in the original disclosure of the subject application on page 9 at lines 4 through 9 of the specification, where alternative elements are positively recited and thus may be explicitly excluded in the

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claims, in accordance with MPEP 2173.05(i), third paragraph. Specifically, this portion of the specification recites that, “[t]he duration of the electromagnetic field and/or the electromagnetic field responsive member(s) 205 may be varied such that opposing second proximal and second distal portions 216 and 218 remain unjoined to each other. Alternatively... a barrier member 300 may be used to prevent the joining of the opposing second proximal and second distal portions 216 and 218.” (Underlining added for emphasis.)

Claim Rejections Under 35 U.S.C. § 103

In the current Office action, the Examiner repeated the rejection of Claims 1 through 5, 7 through 12, and 17 through 20 under 35 USC 103(a) as being unpatentable over Johnson *et al.* (U.S. Patent 5,662,638) in view of Kohler (U.S. Patent 2,293,541 issued 22 January 1946) and Heller *et al.* (U.S. Patent 3,574,031 issued 6 April 1971). The Examiner stated that the “current Application is a CIP and the claims are not supported by any of the parent applications because the new “electromagnetic field responsive member” language is not found in the parent applications. Accordingly, the effective filing date of the current application is the actual filing date, 10 December 1999, and Johnson ‘638 therefore qualifies as prior art.” The Examiner then combined the cited references, ostensibly to arrive at the invention claimed in the subject application.

Applicants' agent respectfully traverses the rejection and submits that the Examiner has not met the requirements for the establishment of a *prima facie* case of obviousness with respect to the pending claims, as amended.

Basic Requirements of a Prima Facie Case of Obviousness

According to MPEP 2143, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Lack of Suggestion or Motivation to Modify the Reference or Combine Reference Teachings

The pending claims of the subject application, as amended, are directed to making a flangeless seam by joining two members without a barrier member. On the other hand, as the Examiner stated, “Johnson ‘638 teaches the use of joining means and a barrier member...in the process of making the flangeless seam”. In fact, the barrier member appears in every described embodiment, in every drawing, and in every claim of the cited Johnson *et al.* ‘638 Patent. The purpose of the barrier member is recited at least nine times in the specification of the Johnson *et al.* ‘638 Patent, including in column 15 at lines 45 through 52, where it is recited that, “[t]he barrier member 205 prevents the joining means 300 from joining the opposing proximal and distal portions 212 and 210. Thus, the seam 10 may be opened from the configuration in which it is sealed...to a flangeless configuration wherein opposing proximal and distal portions 212 and 210 of the first member 200 are in a relatively planar configuration with regard to one another.” (It is noted that the line numbers are grossly misplaced in the printed Patent, such that the quoted text incorrectly appears to fall approximately in lines 43 through 50.) Thus, applicants' agent avers that one of ordinary skill in the art would be led by the Johnson *et al.* ‘638 reference to use a barrier member

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in making the flangeless seam, just as the Examiner stated. Applicants' agent further avers that the Johnson *et al.* '638 reference provides no suggestion or motivation to omit the barrier member.

With respect to the other two references cited by the Examiner, the Kohler reference discloses methods and compositions related to heating and securing components together, but is silent with respect to a barrier member. In particular, since it does not address the opening of a flangeless seam after a sealing step, the Kohler reference provides no suggestion or motivation to modify the method of the Johnson *et al.* '638 reference to omit the barrier member. Likewise, the cited Heller *et al.* reference is silent with respect to a barrier member and provides no suggestion or motivation to modify the method of the Johnson *et al.* '638 reference to omit the barrier member.

In summary, applicants' agent respectfully submits that none of the cited references provides suggestion or motivation to modify or combine references to make the invention of the subject application. In addition, a conclusion of obviousness with respect to the cited references is precluded by the prohibition of MPEP 2142, against impermissible hindsight based on applicants' disclosure, and the recitations of MPEP 2143.01, with respect to the insufficiency of the mere fact that references could have been combined or modified, or that the level of skill in the art may have been adequate to combine or modify them. Therefore, applicants' agent respectfully submits that the suggestion or motivation to modify the Johnson *et al.* '638 reference to omit the barrier member is lacking.

Lack of Teaching or Suggestion of All the Claim Limitations

The Examiner's rejection of claims is based on the Johnson *et al.* '638 reference anticipating the method of the present invention, with the exception of the joining of elements through the use of an electromagnetic field responsive member. However, applicants' agent respectfully submits that the references cited by the Examiner, whether taken singly or in combination, neither teach nor suggest all of the limitations of the pending claims, as amended.

As described above, the Johnson *et al.* '638 reference does not recite a method excluding the use of a barrier member. Therefore, the Johnson *et al.* '638 reference does not teach or suggest all the limitations of the pending claims, as amended. Also, the Kohler and Heller *et al.* references teach nothing regarding a method excluding the use of a barrier member and so do not teach or suggest all of the limitations of the pending claims, as amended. Thus, none of the cited references, when taken alone, teaches or suggests all the limitations of the pending claims, as amended.

Furthermore, the combination of the Johnson *et al.* '638 reference and the Kohler and Heller *et al.* references by one skilled in the art would not yield the present invention, but instead would yield merely a method of making a flangeless seam in which a barrier member is used to prevent the joining of two elements and electromagnetic heating is used for bonding. Therefore, applicants' agent respectfully submits that the combination of the cited references does not teach or suggest all of the limitations of the pending claims, as amended.

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Summary of Argument

The prior art references cited by the Examiner, whether taken singly or in combination, neither provide suggestion or motivation to make the invention of the pending claims, as amended, nor teach or suggest all the limitations of the pending claims, as amended. Therefore, applicants' agent respectfully submits that the Examiner has not met the requirements of MPEP § 2143 for the establishment of a *prima facie* case of obviousness with regard to the pending claims, as amended.

Accordingly, applicants' agent respectfully requests that the rejection under 35 U.S.C. § 103 be reconsidered and withdrawn.

Request for Admittance of Amendment After Final Action

Applicants' agent respectfully requests the admittance of the amendments and arguments of this response in accordance with 37 C.F.R. 1.116. It is the belief of applicants' agent that these amendments and arguments place the pending claims in condition for allowance and are therefore necessary. Applicants' agent did not previously present these amendments and arguments because it was only upon receipt of the Examiner's written response to applicants' previous arguments, and the additional clarification provided by the Examiner by telephone on 24 October, that applicants' agent fully understood the Examiner's view of the relationship of the subject application to the Patent granted in the great-grandparent application and now cited by the Examiner as prior art.

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SUMMARY OF THIS RESPONSE

A typographical error in the specification has been corrected. Independent Claims 1, 4, and 12 have been amended to exclude a barrier member from the claimed methods. The rejection of claims under 35 U.S.C. § 103 has been traversed and argued. Claim 13 has been amended to delete an unnecessary step. No new matter has been added by this response.

In light of the above amendments and remarks, applicants' agent requests that the Examiner reconsider and withdraw the outstanding rejections and allow the pending claims.

Issuance of a Notice of Allowance at an early date is respectfully requested.

Respectfully submitted,

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REPLACEMENT PARAGRAPH MARKED UP TO SHOW CHANGES

SUBMITTED IN ACCORDANCE WITH 37 CFR 1.121(b)(1)(iii)
IN RESPONSE TO OFFICE ACTION OF 6 SEPTEMBER 2001

IN THE SPECIFICATION

Please delete and replace the paragraph beginning on page 13 at line 8 with the following rewritten paragraph:

The means by which the electromagnetic field responsive member 205 may be provided, as well the timing and location for providing the electromagnetic field responsive member 205 will be dependent on the exact electromagnetic field responsive member 205 chosen. However, once a particular electromagnetic field responsive member 205 has been chosen, the electromagnetic field responsive member 205 may be provided by any suitable means known in the art. For instance, if an electromagnetic field responsive member 205 comprising bismuth powder is chosen, one preferred means for providing the [barrier] electromagnetic field responsive member 205 is spraying the bismuth powder composition onto at least a portion of the first member 200. If a polymer or polymer blend electromagnetic field responsive member 205 is chosen, for example, the member 205 may be provided to the seam area of the first or second by a number of standard hot melt or liquid dispersion technologies such as spiral, bead, curtain coat, meltblown, uniform fiber deposition, screen coating, gravure and other similar application techniques. If the electromagnetic field responsive member 205 is a metallic foil, the foil may be cut and slipped into place in the seam region 250 at any point in the process before the seam is made. The electromagnetic field responsive member 205 may be removed from the seam area 250 once the seam 10 is made or may remain as part of the finished seam 10.

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AMENDED CLAIMS MARKED UP TO SHOW CHANGESSUBMITTED IN ACCORDANCE WITH 37 CFR 1.121(c)(1)(ii)
IN RESPONSE TO OFFICE ACTION OF 6 SEPTEMBER 2001

CLAIMS

1. (Twice Amended) A method of making a flangeless seam by joining two members of a disposable article without a barrier member, the method comprising the steps of:
providing a first member of the disposable article;
folding the first member of the disposable article providing opposing first proximal and first distal portions of the first member;
providing an electromagnetic field responsive member adjacent at least a portion of the first member;
providing a second member of the disposable article juxtaposed at least a portion of the first member to form a laminate including the first member, the second member and the electromagnetic field responsive member; and
applying an electromagnetic field across at least a portion of the laminate to heat the electromagnetic field responsive member to a temperature which joins at least a portion of the first member and at least a portion of the second member.
4. (Twice Amended) A method of making a flangeless seam by joining two members of a disposable article without a barrier member, the method comprising the steps of:
providing a first member of the disposable article;
folding the first member of the disposable article providing opposing first proximal and first distal portions of the first member;
providing an electromagnetic field responsive member disposed at least partially between the opposing first proximal and first distal portions of the first member;
providing a second member of the disposable article in a folded configuration juxtaposed at least a portion of the first member to form a laminate including the first member, the second member, and the electromagnetic field responsive member; and
applying an electromagnetic field across at least a portion of the laminate to heat the electromagnetic field responsive member to a temperature which joins at least a portion of the first member and at least a portion of the second member.
12. (Amended) A method of making a flangeless seam by joining two members of a disposable article without a barrier member, the method comprising the steps of:
providing a first member of the disposable article;
folding the first member of the disposable article providing opposing first proximal and first distal portions of the first member;
providing a heat activatable adhesive adjacent at least a portion of the first distal portion;

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providing an electromagnetic field responsive member adjacent at least a portion of the first distal portion;
providing a second member of the disposable article juxtaposed at least a portion of the first member to form a laminate including the first member, the second member, the heat activatable adhesive and the electromagnetic field responsive member; and
applying an electromagnetic field across at least a portion of the laminate to heat the electromagnetic field responsive member to a temperature which activates the heat activatable adhesive such that the adhesive joins at least a portion of the first member and at least a portion of the second member.

13. (Twice Amended) A method of making a flangeless seam by joining two members of a disposable article, the method comprising the steps of:

providing a first member of the disposable article;

providing an electromagnetic field responsive member adjacent at least a portion of the first member;
folding the first member of the disposable article about the electromagnetic field responsive member providing opposing first proximal and first distal portions of the first member, the electromagnetic field responsive member being disposed at least partially between the opposing first proximal and first distal portions;

providing a second member of the disposable article in a folded configuration having opposing second proximal and second distal portions, at least a portion of the second distal portion being juxtaposed at least a portion of the first member to form a laminate including the first member, the second member and the electromagnetic field responsive member;

applying an electromagnetic field across at least a portion of the laminate to heat the electromagnetic field responsive member to a temperature which joins at least a portion of the first distal portion, the second distal portion and the second proximal portion, the electromagnetic field responsive member preventing the joining of the first proximal portion with the first distal portion; and

pulling apart the first proximal portion and the first distal portion to form the flangeless seam.

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providing an electromagnetic field responsive member adjacent at least a portion of the first distal portion; providing a second member of the disposable article juxtaposed at least a portion of the first member to form a laminate including the first member, the second member, the heat activatable adhesive and the electromagnetic field responsive member; and applying an electromagnetic field across at least a portion of the laminate to heat the electromagnetic field responsive member to a temperature which activates the heat activatable adhesive such that the adhesive joins at least a portion of the first member and at least a portion of the second member.

13. (Twice Amended) A method of making a flangeless seam by joining two members of a disposable article, the method comprising the steps of:
- providing a first member of the disposable article;
- providing an electromagnetic field responsive member adjacent at least a portion of the first member;
- folding the first member of the disposable article about the electromagnetic field responsive member;
- providing opposing first proximal and first distal portions of the first member, the electromagnetic field responsive member being disposed at least partially between the opposing first proximal and first distal portions;
- providing a second member of the disposable article in a folded configuration having opposing second proximal and second distal portions, at least a portion of the second distal portion being juxtaposed at least a portion of the first member to form a laminate including the first member, the second member and the electromagnetic field responsive member;
- applying an electromagnetic field across at least a portion of the laminate to heat the electromagnetic field responsive member to a temperature which joins at least a portion of the first distal portion, the second distal portion and the second proximal portion, the electromagnetic field responsive member preventing the joining of the first proximal portion with the first distal portion;
- [removing the electromagnetic field responsive member;] and
- pulling apart the first proximal portion and the first distal portion to form the flangeless seam.